

CLAIMS

What is claimed is:

- 1 1. A method for processing a one-to-one request from a client program to
2 multiple instances of a server program over a protocol, said method comprising:
3 transferring said request from said client program to a multiplexor;
4 generating a plurality of instances of said request using said multiplexor,
5 wherein each of said instances of said request corresponds to a different instance
6 of said server program;
7 transferring said instances of said request from said multiplexor to said
8 instances of said server program;
9 transferring a plurality of responses from said instances of said server
10 program to said multiplexor
11 converting said responses to a uniform response; and transferring said
12 uniform response to said client program.

- 1 2. The method in claim 1, further comprising specifying target instances of
2 said server program to form a fan out target list, to which said instances of said
3 request will be transferred.

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1 3. The method in claim 1, wherein said converting comprises selecting an
2 operation to combine said responses. .

1 4. The method in claim 3, wherein said operation comprises one of listing said
2 responses, aggregating said responses, adding said responses, preparing a subset of
3 said responses, identifying a maximum of said responses, identifying a minimum
4 of said responses, and averaging said responses.

1 5. The method in claim 1, wherein said multiplexor automatically creates said
2 instances of said request.

6. The method in claim 1, wherein said client program, said instances of said server program, and said protocol are unaffected by said method.

1 7. The method in claim 1, wherein said unified response has an instance
2 corresponding to said client program.

1 8. A method of processing a request from a client program to multiple
2 instances of a server program over a protocol, said method comprising:
3 modifying said request to create multiple instances of said request, each of
4 said instances of said request corresponding to a single instance of said server
5 program;

6 transferring said instances of said request to corresponding ones of said
7 instances of said server program; and
8 modifying and combining responses to said request from said instances of
9 said server program to create a unified response.

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1 9. The method in claim 8, wherein a multiplexor alters said request to comply
2 with each instance of said server program.

1 10. The method in claim 9, wherein said multiplexor automatically creates said
2 instances of said request.

1 11. The method in claim 8, further comprising specifying target instances of
2 said server program to form a fan out target list, to which said instances of said
3 request will be transferred.

1 12. The method in claim 8, wherein said converting comprises selecting an
2 operation to combine said responses.

1 13. The method in claim 12, wherein said operation comprises one of listing
2 said responses, aggregating said responses, adding said responses, preparing a
3 subset of said responses, identifying a maximum of said responses, identifying a
4 minimum of said responses, and averaging said responses.

1 14. The method in claim 8, wherein said client program, said instances of said
2 server program, and said protocol are unaffected by said method.

1 15. The method in claim 8, wherein said unified response has an instance
2 corresponding to said client program.

1 16. A method of using a computer program to process a one-to-one request
2 from a client program to multiple instances of a server program over a protocol,
3 said method comprising:

4 using said computer program to transfer said request from said client
5 program to a multiplexor;

6 using said computer program to generate a plurality of instances of said
7 request using said multiplexor, wherein each of said instances of said request
8 corresponds to a different instance of said server program;

9 using said computer program to transfer said instances of said request from
10 said multiplexor to said instances of said server program;

11 using said computer program to transfer a plurality of responses from said
12 instances of said server program to said multiplexor;

13 using said computer program to convert said responses to a uniform
14 response; and

15 using said computer program to transfer said uniform response to said
16 client program.

1 17. The method in claim 16, further comprising using said computer program
2 to specify target instances of said server program to form a fan out target list, to
3 which said request will be transferred.

1 18. The method in claim 16, wherein said using said computer program to
2 convert comprises using said computer program to select an operation to combine
3 said responses.

1 19. The method in claim 18, wherein said operation comprises one of listing
2 said responses, aggregating said responses, adding said responses, preparing a
3 subset of said responses, identifying a maximum of said responses, identifying a
4 minimum of said responses, and averaging said responses.

1 20. The method in claim 16, wherein said multiplexor automatically creates
2 said instances of said request.

1 21. The method in claim 16, wherein said client program, said instances of said
2 server program, and said protocol are unaffected by said computer program.

1 22. The method in claim 16, wherein said unified response has an instance
2 corresponding to said client program.

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1 26. The program storage device in claim 25, wherein said operation comprises
2 one of listing said responses, aggregating said responses, adding said responses,
3 preparing a subset of said responses, identifying a maximum of said responses,
4 identifying a minimum of said responses, and averaging said responses.

1 27. The program storage device in claim 23, wherein said multiplexor
2 automatically creates said instances of said request.

1 28. The program storage device in claim 23, wherein said client program, said
2 instances of said server program, and said protocol are unaffected by said method.

1 29. The program storage device in claim 23, wherein said unified response has
2 an instance corresponding to said client program.

1 30. A multiplexor for processing a one-to-one request from a client program to
2 multiple instances of a server program over a protocol, said multiplexor
3 comprising:

4 a converter for generating a plurality of instances of said request, wherein
5 each of said instances of said request corresponds to a different instance of said
6 server program; and

7 a response combiner for converting said responses to a uniform response.

1 31. The multiplexor in claim 30, wherein said response combiner selects an
2 operation to combine said responses.

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2 listing said responses, aggregating said responses, adding said responses, preparing
3 a subset of said responses, identifying a maximum of said responses, identifying a
4 minimum of said responses, and averaging said responses.

1 33. The multiplexor in claim 30, wherein said converter automatically creates
2 said instances of said request upon receipt of said request.

1 34. The multiplexor in claim 30, wherein said client program, said instances of
2 said server program, and said protocol are unaffected by said multiplexor.

1 35. The multiplexor in claim 30, wherein said unified response has an instance
2 corresponding to said client program.